

IN THE CLAIMS

Please amend the claims as follows:

This listing of claims will replace all prior versions and listing of claims in the application:

Listing of Claims

Claim 1 (Previously amended): An optical scanning device comprising:

a light source;

a first optical system;

a second optical system; and

a mechanical deflector, wherein,

a light beam emitted from said light source is directed to a mirror of said mechanical deflector through said first optical system,

the light beam is deflected in a main scanning direction by causing the light beam to be reflected by a mirror surface of said mirror, the angle of said mirror surface changing due to rotation of said mirror,

the deflected light beam is directed through the second optical system to a surface to be scanned moving in a sub-scanning direction,

said light source, first optical system, mechanical deflector and second optical system are contained in a housing,

said mechanical deflector is directly mounted to said housing, and

material of said housing has heat conductivity smaller than that of a part of said mechanical deflector in contact with said housing so as to reduce heat transfer from the mechanical deflector to components of the first optical system and of the second optical system through the housing.

Claim 2 (Previously amended): The optical scanning device as claimed in claim 1, wherein said mechanical deflector is covered by a cover having an optical window, and, thereby, an air flow occurring due to rotation of said mirror is kept within said cover.

Claim 3 (Previously amended): The optical scanning device as claimed in claim 1, wherein a cooling part forcibly cooling said mechanical deflector is provided.

Claims 4-8 (Canceled).

Claim 9 (Previously amended): A method for performing optical scanning, comprising:

mounting a deflector mounting plate of a mechanical deflector directly to a bottom housing plate of a housing; and

rotating a mirror of the mechanical deflector to deflect a light beam to a surface to be scanned wherein heat created from a rotation of the mirror is transferred through the deflector mounting plate, the bottom housing plate having a heat conductivity smaller than a heat conductivity of the deflector mounting plate.

Claim 10 (Previously amended): The method of claim 9, wherein a cover is provided to the mechanical deflector to substantially contain an air flow resulting from the rotation of the mirror.

Claim 11 (Previously amended): The method of claim 9, further comprising:

forcibly cooling the mechanical deflector with a cooling unit.

Claim 12 (Previously amended): The method of claim 11, wherein the cooling unit is positioned at an exterior surface of the housing.

Claim 13 (Previously amended): The method of claim 11, wherein the cooling unit is arranged as one of a cooling fan and a Peltier device.